neers at Birmingham, whereas Mr. Edward E. Allen informs us that the suggestion was his, although Mr. Crampton appears to have also taken part in the discussion.——The cognate subject of the break is still exercising the inventive and appropriative faculties of many who are anxious, some to be of use to others, others to themselves. Amongst the more recent inventions, one has been patented by a Mr. Tibbet, which is to act as a drag on the wheel, while the break block is pressed with force on the rail. It is to be suspended between the wheels from a strong bearing spring, which keeps it away from the wheel and the rail when not required. The command of it is in the hands of the guard, who works it by means of levers acting on a flanged wheel, or barrel, placed in the centre of the axle, which has a spiral thread cut on its surface, into which cogs or teeth, on the under sides of the levers, take, and prevent the spring from pulling up the break block, as long as it is necessary to keep it in action.——The plan and description of another sort of break, a self-acting one, have been submitted to our inspection by the inventor, Mr. Vincent Yardley. The re-action on the buffers when the driver checks the engine brings this break into action. When the momentum of the carriages, as each comes close up to the one preceding, presses on the buffers, these in their turn press on a rod which turns an eccentric lever, and thus, by the flattening and elongation of a spring (kept back apparently by the counterspring of the buffer when not in action), an elm block with an iron worm surrounding the axle is pushed towards a screw on the end of the same axle, and as the screw enters the worm in order to lock the axle, the block, by means of a pair of iron rods, also brings a pair of strong carriage springs into action on a pair of friction blocks, which grip the axle and retard its movement till the climax of the lock is reached,—by the sliding of the block along a rod as the screw enters,—when the worm, having arrived at its limit on the screw, arrests the motion of the axle and the wheel, unless, indeed, the break itself be broken. In such an invention as this, doubtless, a *simplification* of the mechanism might be easily suggested. The carriage springs, the friction blocks, and the rods connecting the springs with the worm block, for instance, *might* be all dispensed with and the simple break alone remain, if mere simplification of mechanism were to be looked to; but it seems evident that a simplification here would be precisely what would lead right headlong into danger, by leaving nothing but the abrupt,—though certainly simple and effectual,—break of the worm and screw to arrest the carriages,—a simplification probably almost equal to a collision itself—if the break or the axle withstood the simplification, which, of course, they could be made to do without any increase or complexity of mechanism. Indiscriminately to recommend simplification therefore, in such inventions, is much more likely, we should think, to engender danger and evil than would even a like recommendation designedly to complicate the mechanism. A reversal of a few yards, Mr. Yardley adds, will be sufficient to unlock this break.——Mr. Charles Fox, engineer, and Mr. John Coop Haddan, civil-engineer, have recently patented improvements in chairs and trenails or fastenings, in machinery for preparing trenails and sleepers, and in switches. The chairs have a stud for a recess in the sleeper, and the holes for the trenails are rounded to prevent injury to the trenail: the chairs are to be moulded thus, and the trenails to be made of a form suitable to the chairs, by new self-acting machines. The sleeper-machinery is for recessing them for the chairs. The switches at sidings are to move vertically. The specifications of most of these inventions, however, are too long even for abstract here.——British engineers and mechanics have not only been for a series of years enticed into France by high remuneration, but have at length taught the French to vie with ourselves in all that regards the science and art of engineering, although their railway system has progressed so rapidly that in spite of high protecting duties they cannot yet do without us altogether,—a circumstance, it seems, which gives them no little annoyance. In 1820 there were only 15 steam-engines in all France; while, at the present time, there are 4,500, representing the power of 53,480 horses, and having 7,980 boilers.——The average contribution by the English railways to the local and parish rates every year is said to amount to 5 per cent. of their earnings, estimated at nearly 8,000,000*l.* a year; in round numbers, 400,000*l.* towards the 6,000,000*l.* annually raised for the poor,—that is, a fifteenth of the total rates, and fifty times what the same quantity of land contributed before its conversion to railways.——Three cases of compensation have just been decided at Antrim, where three brothers had been offered 50*l.* each for their interest in the one-eighth of two acres, three roods, eight perches of farm ground, which they refused, and demanded three separate juries, who accordingly awarded to each of them 36*l.* 15*s*, with 9*l.* 7*s.* 6*d.* for 'consequential' expenses,—thus causing them to defray one-half the expense of the counsel on their three-juried trial, besides losing 20*l.* each.——The bridge or viaduct over the Boyne, at Drogheda, on the Dublin and Belfast Junction, will be composed of iron lattice-work, and supported on four columns; and will, it is said, combine strength with apparent lightness. The height over the river is 95 feet, and the span between the two inner columns 230 feet, so as to permit the free passage of ships, &c. The railway will be continued over Gothic arches up to the main land on either side. The whole expense including a shipping wharf, and an inclined plane on arches, is estimated at 50,000*l.*

SUSPENSION OF WORKS.

The sharp notice to quit, which so many thousands of those lately engaged in laying the foundations of the railway wealth have already got, has not yet exhausted its dispiriting *fiat*, for the process of discharging workmen and labourers by hundreds and thousands is still going on. On Saturday week upwards of 500 men were paid off by the Great Northern Company. The Oxford and Rugby works are now entirely suspended, and a quantity of bricks made for the works were to be sold on Friday at Upper Heyford, under a 'distress' for duty. Near Aynhoe some of the land staked out for the line is about to be ploughed up and sowed with vetches! Messrs. Sherwood, the contractors for the line, had to face their creditors the other day, and assure them that the money to become due to them in three and six months would be sufficient to pay their demands. A Birmingham correspondent of the *Morning Herald* writes:—"I am sorry to say the mechanics and labourers heretofore well employed by railway companies are being daily discharged. On Saturday last a considerable number of hands employed in a large carriage manufactory were discharged, and many more will follow on Saturday next. Add to these thousands of navvies in this town and neighbourhood, and we shall have an enormous number of unemployed persons immediately thrown upon the rates and the roads."——The men employed on the South Western line, known as 'metal men,' and others, having been ordered to work only from nine in the morning till five in the afternoon, for wages of 1*s.* 6*d.* per day each, refused to comply, and struck work almost to a man. They do not seem to know yet that half a loaf is better than none. But the masons on the new bridge and viaduct across the Tweed, at Berwick, seem to have yet to learn that a whole loaf is better than half a one, for they have thought proper to strike in consequence of an attempt to reduce their weekly wages from 27*s.* to 24*s.* How many hundreds of masons are there already who will thankfully strike into that provision for their families whence their free but unaccepting brethren have just struck out? The Irish, too, are now, as ever, at cross purposes with every one else, themselves included, as one of themselves, if he were only some one else, would readily add. The labourers on the Killarney Junction, in a numerous body, have also struck work, though certainly in the somewhat sympathizable resistance to a proposed reduction of wages from 8*s.* to 6*s.* a week, as a full equivalent for their labour. They have also, however, endeavoured to compel the masons' labourers to quit their work, and thus throw the masons idle. This they were fortunately prevented from doing, and two of the ringleaders were lodged in Bridewell. The poor masons and their labourers, we fear, would require good ball-proof sheds to work in; and as for the contractors, we would rather be in a good coat of ancient armour than within their devoted epidermis.

WESTMINSTER COURT OF SEWERS.

A special court was held on Friday, Nov. 12; Capt. Geo. Bague, R.N., in the chair.

The clerk (Mr. Hertslet) reported, that in obedience to the order of the last court that he should remind the Lord Chancellor, through his secretary, of the period when this commission would expire, he had waited upon Mr. Wing yesterday, and remarked that this court had received no answer to the petition they some time since presented for a new commission. Mr. Wing said he could state that it was the intention of the Lord Chancellor not to renew the commission until the report of the Metropolitan Sanatory Commission had been received. Mr. Hertslet reminded the secretary that, unless it was renewed, it would run out on the 5th of December. Mr. Wing replied, that *it must run out*, unless the report of the Sanatory Commissioners should be made in the meantime.

This answer led to a short conversation, which was terminated by an order to the clerk to report the matter officially to the next ordinary court.

The Action against Mrs. Webb.—Mr. Allason brought under the notice of the court the subject of the order given to Mr. Smith, the solicitor, to defend the action entered by Mr. Farlar in the Marshalsea Court, for an amount claimed by him on the part of a Mr. Gigner, for the accommodation of a sewer constructed by him at Chelsea. (This matter was reported fully in The Builder of last week.) Mr. Allason now wished to know how far they could proceed, not being the *bond fide* defendants in the case, and whether they could legally apply the money of the rate-payers to defend the law-suit involved in these proceedings? By the orders thus given to their solicitor, he believed they were establishing a bad precedent, and it might lead to resistance to their assessments.

The chairman said, that during his walks within the last few days he accidentally fell in with Mr. Whitehead, and casually mentioned to him Mr. Farlar's claim of ownership of the sewer in question, and that gentleman assured him that he had himself built the whole of the sewer from the centre part of the church to the river-side, therefore it would appear very doubtful whether any portion of it really belonged to Mr. Farlar. By some means or other Mr. Farlar had turned one of the sewers from Cromwell-lane to drain it, and, houses having been subsequently erected near to it, he had claimed the sewer as his own.

Mr. Gunter thought that parties acting on advice received from this court should be borne harmless; and he was quite ready to subscribe his share of the expense incurred in defending the action.

Mr. Le Breton protested against the question being re-opened, and thought that before any alteration could be made notice must be given, as it would be unfair to the ten gentlemen who had voted for the resolution that it should be altered in their absence.

The solicitor was of opinion that the commissioners could defend any thing that in sound reason they might deem necessary. However, he thought it was a dangerous precedent for this court to take up the cases of parties who were quite able to defend themselves. As he had not the honour of practising in the Marshalsea Court, he should be compelled to hand over the case to another solicitor.

The matter was terminated by an order to the solicitor to report on the whole subject at the next court.

The next order of the day was a notice given by Mr. T. L. Donaldson at the last court:—"To consider the proceedings to be taken in regard to compelling parties to drain into sewers already built, and to pay contributions to the cost of the original construction; and to rescind, if necessary, the resolution of the 27th of July last with respect thereto."

Mr. Donaldson said, as considerable discussion arose at the last court on this subject, it was his opinion that a special court should be called to consider the question, without at all committing himself to any desire to rescind the resolution. The latter sentence of the resolution he had inserted at the suggestion of the clerk, so that this court might be quite free, if they saw any reason to modify their former resolution. He was of opinion they should form their orders in such manner, profiting by the experience derived from the resistance of Mr. Farlar, to render them as efficient as possible, and moved, in pursuance of these views, the following resolutions:—

"That the surveyor do report on the plans and

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